



# Australian Bureau of Statistics

## 6306.0.55.002 - Technical Manual: Employee Earnings and Hours, CURF, Australia, May 2010

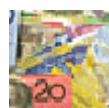
Latest ISSUE Released at 11:30 AM (CANBERRA TIME) 29/09/2011 Final

## Summary

### Contents

This publication is no longer produced. For the latest information on this CURF refer to Microdata: Employee Earnings and Hours, Australia (cat. no. 6306.0.55.001)

## Introduction



### INTRODUCTION

#### OVERVIEW

This technical manual provides information about the release of microdata from the May 2010 Survey of Employee Earnings and Hours (EEH). The microdata are available as an Expanded Confidentialised Unit Record File (CURF) released with the approval of the Australian Statistician. The CURF is accessible through the Australian Bureau of Statistics (ABS) Remote Access Data Laboratory (RADL) and the ABS Data Laboratory (ABSDL).

The RADL is a secure on-line database query system, under which microdata are held on a server at the ABS. Users of the RADL can submit programs in SAS, SPSS and STATA software to interrogate and analyse the microdata, and access the results.

The ABS Data Laboratory (ABSDL) is the data analysis solution for high-end data users who want to extract full value from ABS microdata. The ABSDL provides a more responsive and interactive environment in which to analyse CURFs than that offered by the Remote Access Data Laboratory (RADL). The ABSDL is available to approved clients in a secure data laboratory in any ABS state or territory office.

Further information about the RADL and ABSDL facilities and information about obtaining access to the file is available on the ABS website <<https://www.abs.gov.au/about/microdata>>.

#### ABOUT THE SURVEY

The Survey of Employee Earnings and Hours has been conducted since 1974. It is currently

conducted biennially. The survey produces estimates of the composition and distribution of the weekly earnings of employees, the hours for which they are paid, and the methods used to set their pay (i.e. award only, collective agreement, or individual arrangement).

Estimates from the survey are used by Commonwealth and State government departments, employer associations, trade unions and academic researchers. Estimates from the survey were published in **Employee Earnings and Hours, Australia, May 2010** (cat. no. 6306.0) in January 2011, which is available on the ABS website <<https://www.abs.gov.au>>.

## OCCUPATION

Occupation data are classified according to the ANZSCO - **Australian and New Zealand Standard Classification of Occupations, First Edition** (cat. no. 1220.0).

## INDUSTRY

Industry data are classified according to the ANZSIC - **Australian and New Zealand Standard Industrial Classification, 2006** (cat. no. 1292.0).

# Survey Methodology



## SURVEY METHODOLOGY

### SAMPLE DESIGN

The EEH survey covers all employing organisations in Australia (public and private sectors) except:

- businesses primarily engaged in agriculture, forestry and fishing (ANZSIC Division 1);
- private households employing staff; and
- foreign embassies, consulates, etc.

The employees of employers covered in the survey are in scope if they received pay for the reference period, except:

- members of the Australian permanent defence forces;
- employees based outside Australia; and
- employees on workers' compensation who are not paid through the payroll.

The survey uses a two-stage sample selection approach. The first stage involves selecting a probability sample of employer units from the ABS Business Register. The statistical unit for the first stage comprises all activities of an employer in a particular state or territory based on the Australian Business Number (ABN) unit or Type of Activity Unit (TAU).

In the second stage, businesses selected in the first stage are asked to select a random

sample of employees from their payrolls using instructions provided by the ABS.

## **WEIGHTING AND ESTIMATION**

Records are weighted in two stages, reflecting the two-stage sample design. In the first stage, number-raised estimation is used to estimate the number of employees in each employer unit in the stratum. In the second stage, number-raised estimation is again used to estimate the total number of employer units, resulting in an estimate of employees. The final weight for each selected employee is a combination of the 'employer unit' weight and the 'employee' weight.

## **RELIABILITY OF THE ESTIMATES**

As the information on the CURF relates to a sample of employers and employees, rather than a full enumeration, estimates based on the information are subject to sampling variability, that is, they may differ from the figures that would have been produced if the data had been obtained from all employers and employees. The difference, called sampling error, should not be confused with inaccuracy that may occur because of imperfections in reporting by respondents or in processing by the ABS. Collectively, the errors are called non-sampling error.

### **Sampling error**

The sampling error associated with any estimate can be estimated from the sample results. One measure of sampling error is given by the standard error (SE), which indicates the degree to which an estimate may vary from the value that would have been obtained from a full enumeration (the 'true value'). There are about two chances in three (67%) that a sample estimate differs from the true value by less than one SE, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

Another measure of the sampling error is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

Further information on sampling error is provided in the Technical Note of **Employee Earnings and Hours, Australia, May 2010** (cat. no. 6306.0).

### **Non-sampling error**

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Efforts have been made to reduce non-sampling error by careful design of questionnaires, detailed checking of returns and quality control of processing.

## **SEASONAL FACTORS**

Estimates are based on information collected in the survey month, i.e. May, and, due to seasonal factors, they may not be representative of other months of the year.

## **MORE INFORMATION**

Further information on the survey methodology can be found in:

- **Employee Earnings and Hours, Australia, May 2010** (cat. no. 6306.0); and
- **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001).

These publications are available on the ABS website <<https://www.abs.gov.au>>.

## Using the CURF Microdata



### USING THE CURF MICRODATA

#### ABOUT THE MICRODATA

The EEH Survey microdata are released under the **Census and Statistics Act 1905**, which has provision for the release of microdata in the form of unit records where the information is not likely to enable the identification of a particular person or organisation. Accordingly, there are no names or addresses of survey respondents on the CURF and other steps have been taken to protect the confidentiality of respondents. These include removing some data items from the CURF, reducing the level of detail shown on the CURF for some other items and slightly modifying the weights for a number of records.

Steps to confidentialise the data sets made available on the CURF are taken in such a way as to ensure the integrity of the data sets and optimise their content, while maintaining the confidentiality of respondents. Intending purchasers should ensure that the data they require, at the level of detail they require, are available on the CURF they are intending to use; data obtained in the survey but not contained in the CURF may be available in tabulated form on request. The full list of survey data items included on the CURF is provided in the Excel spreadsheet entitled 'EEH CURF Data Items List' accompanying this Technical Manual.

The CURF contains 60,271 confidentialised respondent records. Each employee record has a unique person identifier (ABSPID). Subject to the limitations of sample size and the data classifications used, it is possible to manipulate the microdata, produce tabulations and undertake statistical analyses to individual specifications.

#### FILE CONTENTS

The Expanded CURF accessed via the RADL and ABSDL contains the following files:

- Information files - including a link to this Technical Manual in HTML format, the Data items list and frequencies;
- SAS user files - including a SAS version of the data set, and the SAS programs that generated the SAS-formatted version;
- SPSS user files - including an SPSS version of the data set; and
- STATA user files - including a STATA version of the data set.

## **USE OF WEIGHTS**

The survey was conducted on a sample of employees from a sample of employers in Australia, and as such users need to take this into account when deriving estimates from the CURF. Each employee record contains a weight (FINPRSWT), and this weight indicates how many employees in the population are represented by this employee. Where estimates are derived from the CURF, it is essential they are calculated using the weights.

An employee's chance of selection in the survey varied considerably, depending on their employer's state, sector, industry and size. If an employee's survey weight is ignored, then no account will be taken of the employee's chance of selection, and the resulting estimates may be biased.

A number of the weights in the CURF have been slightly modified from the original survey weights for confidentiality reasons. This reweighting process has not resulted in significant changes to the estimates and the statistical validity of the CURF is not affected.

## **EARNINGS**

Weekly earnings data items have been perturbed and are expressed as continuous data items (in whole dollars only) on the CURF. Perturbation is a process of slightly altering the reported values to prevent identification of respondents. The distribution of values is not changed significantly through perturbation and the statistical validity of aggregate data is not affected.

## **HOURS PAID FOR**

'Hours paid for' data items were only collected for non-managerial employees. For managerial employees, a value of '0' has been applied to all 'Hours paid for' data items in the CURF. It is therefore important to take this into account when undertaking analysis which includes the 'Hours paid for' data items.

## **RECONCILIATION OF CURF WITH PREVIOUSLY PUBLISHED DATA**

Steps to confidentialise the data made available on the CURF are taken in such a way as to maximise the content of the file while maintaining the confidentiality of respondents. The steps taken to preserve confidentiality include:

- omitting three data items included in previously published output - States and Territories, Sector, and Level of Government;
- reducing the level of detail available for the Employer unit size data item (available on the CURF in two broad groups);
- including industry data at the Division (1 digit) level only;
- perturbing all earnings data items; and
- modifying the weights for some records.

As a result, it may not be possible to exactly reconcile all statistics produced from the CURF with previously published statistics. However, these differences are not significant and should not diminish the value of the CURF in analysis.

# Conditions of Release



## CONDITIONS OF RELEASE

### CONDITIONS OF RELEASE

The May 2010 EEH Survey Expanded CURF is released in accordance with a Ministerial Determination (Clause 7, Statutory Rules 1983, No.19) in pursuance of section 13 of the **Census and Statistics Act 1905**. As required by the Determination, the CURF has been designed so that the information on the file is not likely to enable the identification of the particular person to which it relates.

The Australian Statistician's approval is required for each release of the CURF. Prior to being granted access to the CURF, all organisations, and individuals within organisations, who request access to the CURF will be required to sign an Undertaking to abide by the legislative restrictions on use. Organisations and individuals who seek access to the 2010 EEH Survey Expanded CURF are required to give an undertaking which includes, among other conditions, that in using the CURF data they will:

- use the data only for the statistical purposes specified;
- not attempt to identify particular persons or organisations;
- not disclose, either directly or indirectly, the data to any other person or organisation other than members of their organisation who have been approved by the ABS to have individual access to the information;
- not attempt to match, with or without using identifiers, the data with any other list of persons or organisations;
- in relation to data made available via the Remote Access Data Laboratory (RADL) or the ABS Site Data Laboratory (ABSDL), access the data only in a manner specifically authorised in writing by the ABS; and
- not attempt to access the data after the term of their authorisation expires, or after their authorisation is rescinded by the organisation which provided it, or after they cease to be a member of that organisation.

Use of the data for statistical purposes means use of the content of the CURF to produce information of a statistical nature, i.e. the arrangement and classification of numerical facts or data, including statistical analyses or statistical aggregates. Examples of statistical purposes are:

- manipulation of the data to produce means, correlations or other descriptive or summary measures;
- estimation of population characteristics;
- use of data as input to mathematical models or for other types of analysis (e.g. factor analysis); or
- providing graphical or pictorial representations of the characteristics of the population or subsets of the population.

All CURF users are required to read and abide by **Responsible Access to CURFs Training Manual, September 2009** (cat. no. 1406.0.55.003) available on the ABS website <<https://www.abs.gov.au/about/microdata>>CURF Tool Kits>CURF User Tool Kit>. Use of the data for unauthorised purposes may render the purchaser liable to severe penalties. Advice on the propriety of any particular intended use of the data is available from the Microdata and Multidimensional Data Access Strategies Section via <[microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au)> or on (02) 6252 7714.

## CONDITIONS OF SALE

All ABS products and services are provided subject to the ABS Conditions of Sale. Any queries relating to these Conditions of Sale should be referred to <[microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au)>.

## PRICE

CURF access is priced according to the ABS Pricing Policy and Commonwealth Cost Recovery Guidelines. Information on pricing is available on the ABS website <<https://www.abs.gov.au>>About Us>ABS Pricing Policy>.

The current recommended retail price of the May 2010 Employee Earnings and Hours Expanded CURF is \$1,540.

CURF prices are listed on the ABS website <<https://www.abs.gov.au/about/microdata>>About CURF Microdata>Microdata prices>.

## ACCESSING THE CURF

Clients wishing to access the May 2010 Employee Earnings and Hours Expanded CURF are required to agree to Terms and Conditions of use. Assistance in applying for CURF access is provided on the ABS website <<https://www.abs.gov.au/about/microdata>>About CURF Microdata>. Before applying, CURF clients should read the **Responsible Access to ABS CURFs Training Manual** (cat. no. 1406.0.55.003) and other related CURF information which are available on the CURF Microdata web pages <<https://www.abs.gov.au/about/microdata>>.

## Australian universities

The ABS/Universities Australia Agreement provides participating universities with access to a range of ABS products and services. This includes access to the May 2010 Employee Earnings and Hours Expanded CURF for research and teaching purposes. For further information, university clients should refer to the ABS website <<https://www.abs.gov.au/about/microdata>>ABS/Universities Australia Agreement>.

## Other clients

Other prospective clients should contact the Microdata and Multidimensional Data Access Strategies Section of the ABS via <[microdata.access@abs.gov.au](mailto:microdata.access@abs.gov.au)> or on (02) 6252 7714.

## ORDERING TABLES

Access to the full detail from the survey (including data items excluded from the CURF) is only available through customised tables produced by the ABS. Requirements for these tables should be discussed with Amanda Baile on (08) 9360 5305. For more information about survey data available on request, see the Appendix of **Employee Earnings and Hours, Australia, May 2010** (cat. no. 6306.0).

## FURTHER INFORMATION

For further information please email Microdata and Multidimensional Data Access Strategies Section of the ABS via <microdata.access@abs.gov.au> or on (02) 6252 7714.

For further information about the Survey of Employee Earnings and Hours or the data contained in this CURF, contact Deepa Wright on (02) 6252 7919 or Michael Gerrity on (02) 6252 5514.

## File Content



### FILE CONTENT

#### FILE CONTENT

The Expanded CURF accessed via the RADL and ABSDL contains the following files:

##### SAS files

EEH10E.sas7bdat - this file contains the data for the Expanded CURF in SAS for Windows format.

FORMATS.sas7bcats - this file contains a SAS program to run the SAS formats.

##### SPSS files

EEH10E.sav - this file contains the data for the Expanded CURF in SPSS for Windows format.

##### Stata files

EEH10E.dta - this file contains the data for the Expanded CURF in STATA format.

##### Information files



A link to the HTML version of this Technical Manual.

A link to the EEH CURF Data Items List - this excel file lists the data items contained on the Expanded CURF.

FRECUENCIAS\_EEH10E.txt - these frequency files contain documentation of the data. Data item code values and category labels are provided with frequencies of each value. These files are in plain text format.

## About this Release

This technical manual provides information about confidentialised unit record data from the May 2010 Survey of Employee Earnings and Hours.

The survey is designed to provide statistics on the composition and distribution of earnings and hours of employees and whether their pay is set by award, collective agreement or individual agreement. Distribution and composition of average weekly earnings and hours of employees is classified by sex, adult/junior, full-time/part-time, managerial/non-managerial, industry, occupation, employer unit size and composition of earnings and hours paid for. Methods of setting pay data are also available by jurisdiction.

This expanded CURF is available via the Australian Bureau of Statistics (ABS) Remote Access Data Laboratory (RADL) and the ABS Data Laboratory (ABSDL). The RADL is accessible for authorised users via the ABS website. The ABSDL is available to approved clients in a secure data laboratory in any ABS state or territory office.

## History of Changes

**This document was added or updated on 31/10/2011.**

**31/10/2011** The EEH CURF Data Items List datacube was revised to correct the 'Employee status' variable name on the SPSS and STATA CURF files.

## Explanatory Notes

### Glossary

#### GLOSSARY

##### Adult employees

Employees who are 21 years of age or over, and employees under 21 years old who are paid at the full adult rate for their occupation.

## **Award only**

Awards are legally enforceable determinations made by federal or state industrial tribunals that set the terms of employment (pay and/or conditions) usually in a particular industry or occupation. Awards may be the sole mechanism used to set the pay and/or conditions for an employee or group of employees, or alternatively may be used in conjunction with an individual or collective agreement.

Employees are classified to the Award or pay scale only category if they are paid at the rate of pay specified in the Award and are not paid more than that rate of pay.

## **Casual employees**

Employees who have been identified as being employed on a casual basis. Casual employees usually receive a higher rate of pay, to compensate for lack of permanency and leave entitlements.

## **Casual loading**

A higher rate of pay to compensate for lack of permanency or leave entitlements.

## **Collective agreement**

An agreement between an employer (or group of employers) and a group of employees (or one or more unions or employee associations representing the employees). A collective agreement sets the terms of employment (pay and/or conditions) for a group of employees, and is usually registered with a federal or state industrial tribunal or authority.

Employees are classified to the Collective agreement category if they had the main part of their pay set by a registered or unregistered collective agreement or enterprise award.

## **Employees**

Persons who worked for a private or public employer and received pay for the reference period in the form of wages or salaries, a commission while also receiving a retainer, tips, piece rates or payment in kind. Persons who operated their own incorporated business with or without hiring employees were also included as employees.

## **Employer size**

A measure of the size of the business in terms of the number of employees (headcount) within that business. The employer size reflects the size of the business in a particular state or territory and not necessarily the size of the business Australia-wide.

## **Fixed term employees**

Employees who have been identified as being employed on a fixed term basis. Fixed term employees are employed for a specified period of employment, and may be entitled to paid leave.

## **Full-time employees**

Employees who normally work the agreed or award hours for a full-time employee in their occupation. If agreed or award hours do not apply, employees are regarded as full-time if they usually work 35 hours or more per week.

## Individual arrangement

An arrangement between an employer and an individual employee on the terms of employment (pay and/or conditions) for the employee. Common types of individual arrangements are individual contracts, letters of offer and common law contracts. An individual contract (or letter of offer) may specify all terms of employment, or alternatively may reference an award for some conditions and/or in the setting of pay (e.g. over award payments). Individual contracts may also be registered with a federal or state industrial tribunal or authority (e.g. as an Australian Workplace Agreement). However, the **Workplace Relations Amendment (Transition to Forward with Fairness) Act 2008** ceased the registration of new individual agreements from 28 March 2008.

Employees are classified to the Individual arrangement category if they have the main part of their pay set by an individual contract, registered individual agreement (e.g. Australian Workplace Agreement), common law contract, or if they receive over award payments by individual agreement.

## Industry

Classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006** (cat. no. 1292.0).

## Junior employees

Employees who are under 21 years of age and are not paid at the full adult rate for their occupation.

## Jurisdiction of registered agreement

The federal or state industrial tribunal or authority with which written individual or collective agreements have been certified, approved or registered. Estimates have been compiled based on the workplace relations environment following the introduction of the **Fair Work Act 2009** and the subsequent introduction of the **Fair Work (State Referral and Consequential and Other Amendments) Act**, which allowed for the extension of the **Fair Work Act** to states that refer workplace relations related matters to the Commonwealth. The Fair Work system replaces the **Workplace Relations Amendment (Work Choices) Act 2005** which came into effect in March 2006.

Employees based in the Northern Territory, Australian Capital Territory and Victoria are covered by the national system. From 1 January 2010, employees of private sector employers in New South Wales, Queensland, South Australia and Tasmania are also covered by the national system. Employees based in other states may be covered by either the national or state system depending on the circumstances that prevail in the workplace.

## Jurisdictional coverage of employees

The workplace relations jurisdiction (i.e federal or state) under which that the employee is deemed to be for pay-setting purposes.

## Managerial employees

Employees who are in charge of a significant number of employees and/or have strategic responsibilities in the conduct or operations of the organisation, and usually do not have an entitlement to paid overtime. Includes professionally qualified staff who primarily perform

managerial tasks in conjunction with utilising their professional skills. Owner managers of incorporated enterprises are regarded as managerial employees.

### **Method of setting pay**

How the main part of an employee's pay is set. Employees are classified to one of the following categories: Award only; Collective agreement; or Individual arrangement. Employees classified to the Collective agreement or Individual arrangement categories are further classified according to whether the agreement is registered with a federal or state industrial tribunal or authority.

### **Non-managerial employees**

Employees who are not managerial employees (as defined above), including non-managerial professionals and some employees with supervisory responsibilities.

### **Occupation**

Classified according to the **Australian and New Zealand Standard Classification of Occupations (ANZSCO), First Edition, 2006** (cat. no. 1220.0).

### **Ordinary time cash earnings**

Payment for award, standard or agreed hours of work, including allowances, penalty payments, payments by measured result and regular bonuses and commissions. Amounts salary sacrificed are also included. Excluded are non-cash components of salary packages, overtime payments, retrospective pay, pay in advance, leave loadings, severance pay, and termination and redundancy payments.

### **Ordinary time hours paid for**

Award, standard or agreed hours of work, paid for at the ordinary time rate. Included are stand-by or reporting time which are part of standard hours of work, and that part of annual leave, paid sick leave and long service leave taken during the reference period. Ordinary time hours paid for was not collected for managerial employees.

### **Overtime cash earnings**

Payment for hours in excess of award, standard or agreed hours of work.

### **Overtime hours paid for**

Hours which are in excess of award, standard or agreed hours of work, paid for at the overtime rate. Overtime hours paid for was not collected for managerial employees.

### **Owner manager of incorporated enterprise**

Persons who work in their own incorporated enterprise - that is, a business entity which is registered as a separate legal entity to its members or owners (for example, a limited liability company). Owner managers of incorporated enterprises are presented separately in estimates that are clarified by method of setting pay.

### **Part-time employees**

Employees who normally work fewer than the agreed or award hours for a full-time

employee in their occupation. If agreed or award hours do not apply, employees are regarded as part-time if they usually work fewer than 35 hours per week.

### **Permanent employees**

Employees who have been identified as being employed on a permanent basis. Permanent employees are usually employed on an ongoing basis and are entitled to paid annual and sick leave.

### **Salary sacrifice**

An arrangement under which an employee agrees contractually to forgo part of the remuneration which the employee would otherwise receive as wages and salaries in return for the employer or someone associated with the employer providing benefits of a similar value (**Australian Taxation Office**).

### **SAS**

A data analysis and statistical software system.

### **SPSS**

A data analysis and statistical software system.

### **STATA**

A data analysis and statistical software system.

### **Total hours paid for**

Equal to ordinary time hours paid for plus overtime hours paid for. Total hours paid for was not collected for managerial employees.

### **Weekly total cash earnings**

Weekly total cash earnings of employees is regular wages and salaries in cash and is equal to weekly ordinary time cash earnings plus weekly overtime cash earnings.

## **Abbreviations**

### **ABBREVIATIONS**

ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ABSDL	Australian Bureau of Statistics Data Laboratory
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
CURF	Confidentialised Unit Record File
EEH	Survey of Employee Earnings and Hours
RADL	Remote Access Data Laboratory
RSE	relative standard error
SE	standard error

TAU            type of activity unit

## **Data Items List (Appendix)**

### **APPENDIX DATA ITEMS LIST**

#### **DATA ITEMS LIST**

For data items and structure, see the Excel spreadsheet entitled 'EEH CURF Data Items List' accompanying this Technical Manual. This spreadsheet provides the data items and SAS names which relate to the EEH CURF. Every record has an identifier ABSPID.

## **Data Cubes (I-Note) - Data Cubes**

The EEH CURF Data Items List datacube was revised to correct the 'Employee status' variable name on the SPSS and STATA CURF files.

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